

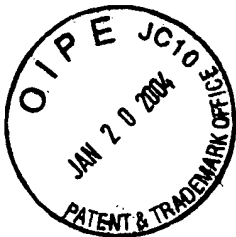
## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Satoshi BAN et al.

Serial No. 09/003,812

Filed: 07 January 1998



Group Art Unit: 2644

Examiner: L. Grier

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Technology Center 2600

For: **MULTIPURPOSE EARPHONE SET** (as amended)Mail Stop AF

COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

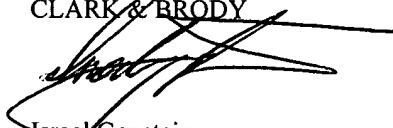
Transmitted herewith is an **APPEAL BRIEF**, in triplicate in the above identified application.

- ☐ No additional fee is required.
- ☐ Small entity status of this application under 37 CFR 1.9 and 1.27 has been established by a verified statement previously submitted.
- ☐ A verified statement to establish small entity status under 37 CFR 1.9 and 1.27 is enclosed.
- ☒ Also attached: **Form 2038** in the amount of \$440 to cover a one month extension and the fee for filing the Brief.

The fee has been calculated as shown below:

	NO. OF CLAIMS	HIGHEST PREVIOUSLY PAID FOR	EXTRA CLAIMS	RATE	FEE
Total Claims	4	20	0	x \$ =	\$ 0.00
Independent Claims	2	3	0	x \$ =	\$ 0.00
If multiple claims newly presented, add \$260.00					\$0.00
Fee for one month extension of time					\$ 110.00
Fee for filing Brief on Appeal					\$ 330.00
<b>TOTAL FEE DUE</b>					<b>\$ 440.00</b>

- ☒ Form 2038 in the amount of \$440.00 is attached
- ☒ The Commissioner is hereby authorized to charge payment of any fees associated with this communication or credit any overpayment, to Deposit Account No. 50-1088, including any filing fees under 37 CFR 1.16 for presentation of extra claims and any patent application processing fees under 37 CFR 1.17.

Respectfully submitted,  
CLARK & BRODY
  
 Israel Gopstein  
 Registration No. 27,333

 1750 K Street, N.W. Suite 600  
 Washington, D.C. 20006  
 Date: January 20, 2004

 (202) 835-1111  
 (202) 835-1755 (fax)

Docket No.: 041-1987

**PATENT**

#26  
B.J.  
2/6/04

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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For: **MULTIPURPOSE EARPHONE SET** (as amended)

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**APPEAL BRIEF**

**Mail Stop Appeal Briefs - Patents**  
**COMMISSIONER FOR PATENTS**  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed  
October 17, 2003.

**1. REAL PARTY IN INTEREST**

The real party in interest in the present appeal is the assignee hereof,  
Matsushita Electric Industrial Co., Ltd., of Osaka, Japan.

**2. RELATED APPEALS AND INTERFERENCES**

No other appeals or interferences are known which will directly affect or be  
directly affected by or have a bearing on the Board's decision on the pending appeal.

**3. STATUS OF THE CLAIMS**

Claims 8-11 are pending. Claims 9 and 11 have been allowed; claims 8 and

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10 stand finally rejected over prior art and the rejection of claims 8 and 10 is under appeal herein.

#### **4. STATUS OF AMENDMENTS**

None of the claims has been amended after Final Action.

#### **5. SUMMARY OF INVENTION**

Applicants' invention provides an earphone, or earphone set, connected for receiving different signals (such as an audio signal from a CD player, for example, and a signal from a communication device such as a telephone, for example) and for automatically switching the signals received by the earphone.

Advantageously, the invention includes structure which detects activity of the communication device, such as an incoming call, generates a detection signal indicative of such detection, and which automatically switches the signals connected to the earphone in response to the detection signal.

While the Examiner has allowed claims 9 and 11 reciting similar and added capabilities of the invention, the recitations of claims 8 and 10 stand rejected. In accordance with the provisions of 37 CFR 1.192 (c)(5), the following summarizes the invention as recited in claims 8 and 10 involved in the appeal with particular reference to the specification by page and line number and to the drawing by reference characters.

#### ***Independent Claim 8***

Claim 8 recites an earphone apparatus (as generally shown in Fig. 3, for example) for an audio device (not shown, but connected to plug 1 in Figs. 3-4, as

noted at page 17, line 7) and for a portable communication terminal device (not shown, but connected to plug 2 in Figs. 3-4, as described at page 17, line 8).

As disclosed at page 1, lines 8-9, the audio device may be a CD player, a cassette tape player, or a radio receiver, for example. As noted at page 1, lines 10-12, the communication device may be a portable telephone device or a portable radio communication device.

As noted at page 5, lines 6-9 and 15-17, the audio device and terminal device are disconnectably connected to an electroacoustical transducer 5A (or 5B), forming the earphone, by plugs 1 and 2.

Fig. 4 shows that signals from the first and second plugs are switchably transferred to the transducer (earphone or loudspeaker) 5A after passing through change box 30 (p. 14, line 6). In the switching configuration shown in Fig. 4, transducer 5A is connected for receiving an audio signal provided by first plug 1, which is shown as connecting to the transducer through contacts 31A and 31C of a switch 31 (p. 14, lines 9-16).

The recited structure includes a first means (e.g., level detection circuit 34 of Fig. 4, as described at page 16, lines 6-8, which is connected to a reception signal line 13 of the second plug 2). As described at p. 16, lines 12-20, level detection circuit 34 operates for detecting whether or not a call-related electric signal is outputted on line 13 from the portable communication terminal device connected to plug 2.

Claim 8 explicitly requires the first means to generate a ***detection result signal*** representative of a result of the detecting implemented thereby, as noted at page 16, lines 17-20. This signal may be further processed by a pulse elongating circuit 35, for example, as described at page 17, lines 3-5 and 20-23.

Claim 8 further recites a specific structural element in the form of a second means, such as switch 31, for implementing the automatic disconnection of a signal from one signal source and automatic connection of a signal from the other, as follows.

As shown in Fig. 4, switch 31 is connected to the first plug 1, to the second plug 2, to the electroacoustical transducer 5A and to the first means 34. More specifically, Fig. 4 shows that first fixed contact 31A of switch 31 is connected to plug 1, that second fixed contact 31B of switch 31 is connected to second plug 2, that movable contact 31C of switch 31 is connected to transducer 5A, and that the output of level detection circuit 34 is connected to switches 31 and 32 (after possible further processing by circuit 35) as noted at page 16, lines 17-23.

As required by the claim recitation, the second means operates for ***automatically disconnecting the audio signal*** provided by first plug 1 from the transducer 5A ***and automatically connecting the second plug 2*** to the transducer 5A. Claim 8 requires that such disconnection and connection be implemented automatically, ***in response to the detection result signal*** generated by the first means when the first means detects that a call-related electric signal is outputted (on line 13) from the portable communication terminal device (connected to plug 2).

The specific manner in which this operation is implemented is not explicitly recited in claim 8, but is disclosed in the paragraph beginning at page 18, line 6. More particularly, when level detection circuit 34 detects, for example, that a ring signal is present (p. 18, lines 13-17), the resulting change in output signal of circuit 34 causes movable contact 31C to be disconnected from contact 31A and connected to contact 31B, as described at page 18, lines 17-23).

As such, the audio signal is blocked by switch 31 from reaching transducer 5A, and the ring signal is connected to the transducer, as disclosed at p. 19, lines 1-4.

Therefore, the inventive earphone apparatus of claim 8 includes structure with specifically recited connections, and specifically recited operation, operating to produce a specific signal (detection result signal), and in response to that signal, to disconnect a signal of one source from a transducer and to connect a signal of another source to the transducer.

#### ***Dependent Claim 10***

Claim 10 depends on claim 8 and thus includes all the features thereof. Additionally, claim 10 recites the apparatus as including a specific configuration and interconnection between a microphone 21 and other elements of the apparatus.

More particularly, the claim requires the presence of microphone element 21, with specific connection to the second plug 2, and a switch 22, which is also recited as being connected to the second plug.

The additional structure is recited as being provided for: 1) generating a control signal, which is 2) transmitted to the portable communication terminal device.

The details of the recited structure (which is shown in Fig. 4) are described at page 8, lines 16-26. Although this description is provided with respect to the embodiment of Fig. 2, it should be appreciated that the same is also applicable to the embodiment of Fig. 4 upon replacement of reference numeral "19" (representing "ground" in Fig. 2) by corresponding reference numeral "16" (representing "ground" in Fig. 4).

Operation of the embodiment of Fig. 10 is described at page 19, line 9, through page 22, line 8.

It is noted that the function of "generating a control signal transmitted to the portable communication terminal device" may be appreciated from the initial portion of that description, at page 19, lines 9-15, as follows. From other description in the specification, it is noted that upon receipt of a ring signal on line 13, operation of level detection circuit 34 and switch 31 causes the ring signal to be heard by the user in transducer 5A (p. 19, lines 6-8). In response, the user may actuate switch 22, which generates an answer signal transmitted to the portable device connected to plug 2.

Although operation of the portable communication device is not explicitly recited in claim 10, it should be appreciated that the recitation, in any case, provides

explicit structure and function to generate a control signal (answer signal) to be provided thereto.

Thus, the arrangement of claim 10, separately and independently of the arrangement of claim 8, does not merely include a microphone for use with transducer 5A, but in fact permits bi-directional communication to take place between the apparatus of Fig. 4 and the communication device connected thereto.

## **6. ISSUES**

The issue for consideration by the Board is whether each of applicants' claims 8 and 10 would have been obvious to one of ordinary skill in the art under 35 USC 103(a) over the teachings of Young III U.S. Patent 5,694,467 ('467) in view of Porco U.S. Patent 4,873,712 ('712).

## **7. GROUPING OF THE CLAIMS**

Applicants note that, although the Examiner has not grouped claims 8 and 10 together in a single rejection, both claims are rejected under the same rejection: Obviousness under 35 USC 103(a) over the same references ('467 in view of '712).

Applicants respectfully submit that claims 8 and 10, though similarly rejected, do not stand or fall together. Applicants courteously submit that each of the claims is separately patentable over the art applied thereto.



## **8. ARGUMENT**

### **a) Patentability Over the Art**

Irrespective of apparent inconsistencies in the Final Action, noted in applicants' Request for ... Corrected Action filed September 30, 2003, and to the extent understood from the Action, the Examiner (separately) rejects claims 8 and 10 as being unpatentable under 35 USC 103(a) over Young III '467 in view of Porco '712.

Applicants respectfully submit that the rejection is improper, is not supported by the applied art when properly construed, and further appears to apply an erroneous standard as to determination of "obviousness".

As such, it is submitted that the Official Action fails to make a *prima facie* showing of obviousness and should be reversed.

Having previously summarized the nature of the present invention, the following remarks are provided to summarize the disclosures of the applied references in order better to appreciate differences between the claimed invention and the applied art.

### **Young III '467**

As described at column 2, lines 7-26 therein, the '467 reference provides an integrated sound and telephone headset system which is "manually switched between Modes by the user" (col. 2, lines 25-26). The integrated system has three operating modes, which include: 1) a telephone mode in which the phone 10 is operated from headset 40; 2) a music mode in which headset 40 is connected to a

mixer 22 within control box 20 to receive audio signals from music source 30, the headset being disconnected from the telephone; and 3) a bypass mode in which the headset is connected to the mixer but the phone is manually operated.

As described therein (col. 2, lines 32-33), "The operational mode is selected by positioning the headset microphone" over the user's head or in front of the user's mouth (col. 2, lines 34-37). A microswitch 41 detects to position of microphone 42 and sends a position signal over line 49 to the control box 20 (col. 3, lines 50-61). When an audible ring signal is transferred to the headset the user responds by lowering the microphone position, and microswitch 41 provides the resulting signal on line 49. In response to the position signal, control box 20 pauses the music source 30, disconnects mixer 22 from audio line 47, and connects the audio line to the audio on handset line 15 of the phone (col. 4, line 66 to col. 5, line 3). At the end of a conversation, the user raises the microphone 42 to switch back to the music mode and to disconnect phone 10 from the public switched telephone network (col. 5, lines 22-26).

As admitted by the Examiner (Action, p. 2, last 4 lines), the disclosure of '467 relies on physical manipulation of the microphone and "fails to disclose automatic disconnection of the plugs." The Examiner then argues that "automatic disconnection capabilities were will known in the art" (p. 2, last two lines).

It is courteously submitted that, whether or not such *capabilities* were known, the issue before this honorable Board is whether the recited *structure* of claim 8 would have been obvious. In other words, whether the applied art would have

suggested to one of ordinary skill a structural combination including, *inter alia*, a first means “for detecting whether or not a call-related electric signal is outputted from the portable communication terminal device, and generating a detection result signal representative of a result of said detecting”, or a second means interacting therewith in the manner recited.

It is clear that ‘467 is manually operated and thus fails to provide or suggest any such structure.

In that regard, though not applied by the Examiner, it is noted that the ‘467 reference discloses at column 5, lines 47-50 that “Control Box 20 can be designed to automatically switch the system from the Music Mode to the Telephone Mode when a telephone ring signal is detected on Phone Line 26.”

Applicants had noted this disclosure at pages 9-10 of their paper filed October 5, 2001. However, applicants had further pointed out that, even if such a hypothetical suggestion is considered, the reference nonetheless fails to teach the second means in claim 8. As hereinabove noted, the second means implements automatically switching in response to the detection result signal generated by the first means which detects that “a call-related electric signal is outputted from the portable communication terminal device”.

It is noted that in the suggestion of the ‘467 reference however, no such signal is used. Rather, as noted therein, the automatic switching is implemented “when a telephone ring signal is detected on Phone Line 26.”

In other words, Young clearly fails to teach a first means as recited in claim

8, which detects whether or not a call-related electric signal “is outputted from the portable communication terminal device”. Further, Young fails to teach or suggest a second means which responds to the non-existent first means.

In response to applicants’ remarks, the Examiner cited the Porco reference ‘712. Thus, in order to cure the admitted deficiency of the ‘467 reference, the Final Action applies Porco and asserts that the ‘712 reference “discloses a telephone controller interrupter circuit” and “teaches the automatic disconnection of an audio device for the purpose of receiving and/or answering a telephone when indicated by ring signal which controlled by a switching circuit”, referring to the Abstract, to Figs. 1-2 and to the disclosure at col. 3, lines 24-55 of ‘712.

The Examiner asserts (Final Action, page 3, second paragraph) that “it would have been obvious ... to modify the invention of Young by implementing the means of automatic disconnection and/or disablement of the audio [while the user is in a conversation] and further the automatic disconnection means enables more convenience for the user... . Further, such alternative capabilities, e.g., automatic means or functions ... to replace manual functions is well known to one skill [sic] in the art for providing the same function or end result”, referring to *In re Venner*, 120 USPQ 192, MPEP 2144.04.

As demonstrated in the following, Porco functions in a completely different manner from that found in the recitation of claim 8, and thus fails to provide or suggest the structural components of the rejected claim.

As such, even if used to modify Young, there would not, and could not, result the structure recited in claim 8.

Porco '712

The '712 reference provides an interrupter circuit 26 in an automotive electrical system 10 (col. 2, lines 67-68) serving a vehicular telephone and an audio system (Abstract, lines 1-2). A monitoring circuit 24 is provided which, upon detecting current changes related to telephone operation, generates a control signal applied to the interrupter circuit to *interrupt the flow of power* (Abstract, lines 6-9), thereby disabling the audio system.

Indeed, the '712 reference teaches that it improves over the prior art by providing "an interrupter unit that *need not have access to the internal circuits* or switches of either system" (col. 1, lines 66-68).

Thus, it is clear that rather than curing the admitted deficiency of '467 to provide a system operating according to the recitation of applicants' claim 8, Porco teaches away from claim 8. Specifically, applicants' recitation requires a transducer "receiving an audio signal provided by said first plug", and further requires a second means "automatically disconnecting the audio signal provided by said first plug from the electroacoustical transducer". That is, a specific signal generated by the audio device for the speakers is disconnected from the speakers, while a second plug is automatically connected to the speakers.

However, the '712 reference does not have access to circuitry internal to the audio system (such as circuitry connected to the speakers). Thus, the '712 reference is *incapable of disconnecting the audio signal from the transducer.*

Instead, as clearly disclosed in the first line of the Abstract, the control unit of '712 is inserted "in the power lines..." and, upon detection of a current increase due to telephone operation, the control unit "interrupts the flow of *power* to the audio system circuits" rather than disconnecting the audio signal from the transducer.

Figures 1 and 2 clearly show that interrupter circuit 26 deactivates audio system 22 by interrupting (shutting off) power flow to that system. However, as is clearly apparent from Fig. 1, *audio system 22 remains connected to the two speakers* associated therewith and thus the reference fails even to suggest any structure for "disconnecting" the audio signal from the speaker.

One should not be misled by the phrase "audio interrupter circuit" occurring at col. 2, line numbered 8 inasmuch as the reference clearly fails to disconnect or interrupt audio to the speakers but, instead, interrupts power to the entire audio circuit.

To the extent that interrupting power will have the consequence of *terminating* audio, it is noted that, in the first instance, claim 8 does not merely recite an end result. Rather, the claim clearly and unambiguously recites specific connections of specific (first and second) means, each performing a specific function in accordance with the provisions of 35 USC §112 ¶6. Secondly, claim 8 does not

recite “terminating” an audio signal but, instead, provides for “disconnecting” the signal from the speakers.

Indeed, as described at col. 3, lines 38-40, the preferred embodiment of ‘712 provides “switched power” to audio system 22 and, while an indication is made at lines 40-41 that “some prefer that the audio system 22 be powered at all times”, there is no teaching how to switch power only to the speakers. Even if power switching to the speakers is to be used, however, it is quite clear that the reference fails to teach, disclose, suggest or consider any disconnection of the audio circuit from the speakers, or transducers, as recited in applicants’ claim 8.

Indeed, in addressing the preference for powering the audio system at all times, ‘718 notes at lines 41-42 that such powering is desired “so that particular programs or selections not be interrupted” – i.e., so that the audio signal continue to be provided to the speakers, even “when the engine is stopped.”

Therefore, while interrupting power to the audio circuit will terminate the audio output therefrom, the reference fails to disclose, teach or suggest any manner in which an audio signal may be disconnected from a speaker, and replaced by a signal from a communication device, in response to detection of call related signal of the communication device.

#### The Rejection

##### *CLAIM 8*

As hereinabove noted, in rejecting claim 8 under 35 USC 103(a) the Examiner admits that ‘467 “fails to disclose automatic disconnection of the plugs.” To cure the

deficiency, the Action relies on '712, and particularly on the disclosure at Figs. 1-2, col. 3, lines 24-55 and the Abstract thereof.

As set forth in MPEP §2143.03, in order to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

It is respectfully submitted that, in the present instance, the rejection of claim 8 has failed to meet this requirement.

Despite two repeated requests by applicants to address the specific language of claim 8, the pending rejection has failed to do so. Thus, the amendatory language of claim 8, as amended January 8, 2003, reciting that the transducer is "connected for receiving an audio signal provided by said first plug" and further that the second means operates "for automatically disconnecting the audio signal provided by said first plug from the electroacoustical transducer" and for automatically connecting the second plug to the electroacoustical transducer, all in response to the detection result signal, has not been addressed.

In considering the applied art as if applied to the amended claim, as hereinabove emphasized, it is noted that the primary applied reference fails to provide any automatic disconnection of the audio signal coming to the transducer from the plug, and particularly fails to provide "automatic disconnection" by implementing a particular function in response to a particular signal. Moreover, the



second reference which allegedly cures the deficiency similarly fails to accomplish the recited function. That is, the '712 reference fails to disconnect the audio signal provided by the first plug from the transducer and, instead, teaches a completely different approach of disconnecting power.

One of ordinary skill is well aware of the distinct differences between power switching and disconnection of audio signals. It is therefore improper to assert that by implementing the disconnection taught by '712 in the '467 reference there would result the structure recited in claim 8, functioning as set forth therein.

In other words, at least one of "claim limitations [is not] taught or suggested by the prior art" applied in the action and, accordingly, the action fails to establish *prima facie* obviousness in the manner set forth at MPEP §2143.03.

The Action attempts to correct the deficiency by noting at page 4, lines 3-7, that power interruption "may be interpreted as disconnecting and/or muting", stating in an incomprehensible sentence that such may be interpreted as "the significance of the teachings the Poco reference" and then stating "wherein it is common have [sic] automatic audio disconnection of an audio device when there is an [sic] telephone coupled within the same system of use."

The Action fails to indicate whether the assertion relates to it being common in the art to provide audio disconnection or whether it is common in the Porco reference to do so. If the Examiner asserts that it is common in the art, then support for the position should be given. If the Examiner asserts that it is common in Porco to do so, then the assertion is in error as noted in the foregoing analysis.

That is, Porco does not disconnect the audio signal provided to a transducer from a plug, as recited. Porco merely terminates operation of the audio circuit, which is quite a different concept and operation.

It is noted that, at lines 9-11 of the paragraph beginning at line 2 of page 4 of the Action, the Examiner addresses the above noted discrepancy. However, it is asserted that Porco is provided only to teach the automatic function between two devices, and that Young teaches “all aspects of the invention, with the exception that the Young’s system does not function automatically for initiating the switch between the two devices.”

However, as previously noted, it is clear that Young fails to provide the *structure* recited by applicants to implement the automatic functioning. That is, contrary to the assertion at lines 6-9 of the second paragraph of page 3 of the Action, applicants do not merely recite an “automatic means” but, instead, provide a particular structure implementing a specific manner of operation in order to attain the “automatic” result without user intervention.

Indeed, MPEP §2144.04 cited by the Examiner with respect to *In re Venner*, does not support the Examiner’s assertion that “automatic means to replace manual functions is well known...”. Instead, the relevant section of the Manual summarizes the court’s holding as “*broadly* providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art” [emphasis added]. As clear from claim 8 and from the

foregoing discussion, applicants have not “*broadly*” provided means for automatically performing a function.

Rather, claim 8 recites a structure, including interconnections among plugs, transducers and various means, in which the second means is recited as “disconnecting the audio signal provided by said first plug from the electroacoustical transducer and ... connecting the second plug to the electroacoustical transducer in response to the detection result signal generated by the first means” when a particular signal is detected by the first means.

Thus, the claim identifies particular signals being detected, particular signals being generated in response thereto, and particular actions of disconnecting and connecting being implemented in response to the generated signal. The fact that the claim adds a further adverb “automatically” to describe the verbs “disconnecting” and “connecting” does not automatically place the claim under the *Venner* holding.

Rather, the claim must be considered in its entirety, and the signal detection, signal generation, and signal responsiveness must be recognized as part of the recitation. In order to comply with MPEP § 2143.03, “all the claim limitations must be taught or suggested by the prior art”, not just a similarity in end result. Nor can a limitation which includes a term “automatically” be automatically ignored, as apparently done in the present instance.

Inasmuch as the primary ‘467 reference fails to teach automatic disconnection and connection in general, and specifically fails to teach first and second means as

recited in claim 8, it is incumbent on the Examiner to identify other art which teaches or suggests such means.

However, as clearly illustrated in the foregoing, and as clearly described in the secondary '712 reference, the structure thereof is not applied to connection or disconnection of audio signals but to interruption of power; the structure thereof is intended not to access any internal circuits, such as connections to a transducer; and the structure thereof clearly leaves the output from music source 22 connected to the transducers (speakers) thereof.

Thus, the extent of the teaching of Porco which the Examiner asserts would have been obvious to incorporate in Young III is summarized at col. 3, lines 58-61 as follows: A control signal is applied to an interrupter circuit which, through an electronic switch, "effectively disconnects the audio system 22 from the source of power [rather than disconnecting the audio signal from the transducers]. When the control signal ... is removed, the power to the audio system 22 is restored."

In other words, as described at col. 5, lines 7-8 and 25-27, once "the telephone circuit 20 ... becomes active and begins to draw current, ... the *power* to the audio system 22 is interrupted, silencing the audio system 22 during operation of the telephone 20 [emphasis added]."

However, nowhere does Porco provide any suggestion of automatically disconnecting the electroacoustical transducer from the source of *audio signals* and connecting the transducer to the portable communication terminal device, as recited in claim 8.

Therefore, one of ordinary skill in the art attempting to incorporate the Porco teaching in the disclosure of Young III would follow the teaching of '712 and attempt to disconnect music source 30 from its power source, rather than to implement applicant's invention.

It is accordingly submitted that a combination of the references applied in the Action fails to result in a structure implementing applicants' invention or meeting the recitation of claim 8 therefor. Thus, the rejection fails to establish a *prima facie* showing of obviousness of the claim and reversal is in order.

As yet another apparent deficiency of the Action, reference is made to lines 6-9 of the second paragraph of page 4 wherein the following statement is made:

“Eventhough, Poco [sic] discloses that audio system is preferred by some to be powered at all times, it does not provide an alternate exclusive embodiment or features of an audio system being powered at all times during the telephone conversation.”

The meaning of this statement is, at best, unclear. However, to the extent understood, the statement appears to posit that, since the Porco reference does not provide an embodiment which *excludes* features recited in claim 8, therefore the reference may be interpreted as providing the disconnection of audio signals from, and the connection of the communication device to, the transducer as recited in the claim.

If this is the intended meaning of the statement, then a clear error is identified in the rejection. The prior art must be considered in its entirety, insofar as it teaches or suggests a recited structure. But any suggestion that a reference may be interpreted as broadly as desired to meet a claim configuration so long as the

reference does not exclude such a configuration is in error and without foundation in the law.

Still further, it appears the Action fails to recognize that applicants' claim 8 explicitly requires "a first plug for disconnectable connection with the audio device" and "a second plug for disconnectable connection with the portable communication terminal device" and that no such plugs are provided in the art.

As noted above with respect to the '467 reference, the system of Young III is "an *integrated* sound/telephone headset system", which nowhere shows any disconnectable connections for the lines from either phone 10 or music source 30 to control box 20.

Inasmuch as applicants' recited structure provide disconnectable plugs, it is clear that the recited earphone apparatus may be used with arbitrary audio sources and arbitrary portable communication devices. However, as the system of '467 is "integrated" with no apparent disclosure of disconnectable plugs, it appears that the prior art system may be permanently fixed ("integrated") to a specific music source and a specific phone, and may not be disconnected therefrom. Such a configuration appears to be the intent, notwithstanding the disclosure at col. 3, lines 18-19 that "Phone 10 is a standard analog or digital telephone...".

Thus, the control box disconnects integral internal connections therein, as can be observed upon comparison of Figs. 1, 2 and 3 of '467, but does not provide the disconnectable plugs of claim 8.

As the Porco '712 reference is included in an automotive vehicle, and from the drawing figures and disclosure thereof, it is clear that the secondary '712 reference also fails to provide such a feature.

Therefore, it appears that even the requirement of plugs for disconnectable connection to the audio source and communication device are not suggested by the applied art so that yet another feature of claim 8 fails to find teaching or suggestion in the applied art.

It is therefore clear that, for any of several reasons, the rejection of claim 8 in the Final Action fails to establish a *prima facie* showing of obviousness of the claim and should be reversed.

#### *CLAIM 10*

Notwithstanding its dependence on claim 8, it is respectfully submitted that claim 10 is separately patentable over the prior art and does not stand or fall with its parent claim.

It is particularly submitted that, although dependent on (and incorporating the features of) claim 8, claim 10 adds both structure and function to the embodiment recited in its parent claim which is neither disclosed nor suggested by the applied art.

As hereinabove noted, claim 10 adds to the earphone apparatus recited in claim 8 a microphone element 22 and a switch 21. Claim 10 does not arbitrarily include the two elements in the combination of claim 8. Rather, for specific reasons noted in the summary of the invention, the claim requires each of the new elements

to be connected to the second plug, and explicitly recites a function to be performed thereby.

That is, the embodiment recited in claim 10 does not merely require a microphone which outputs an audio signal. If that were the entirety of the recitation then an Examiner might, indeed, assert that such a structure is inherent in the disclosure of the '467 reference. However, rather than simply inserting a microphone for use with the earphone apparatus of claim 8 to provide user input to the electroacoustical transducer 5A, claim 10 combines the microphone with a switch, and requires the switch to output a particular signal.

Thus, rather than simply turning on or off the microphone output to the recited transducer by passing or blocking the output signal thereof to the transducer, claim 10 explicitly requires the added combination to perform a function of "generating a control signal transmitted to the portable communication terminal device."

It is courteously submitted that such bi-directional operation, in which the earphone apparatus of claim 8 not only receives properly switched audio signals from two sources but provides bi-directional communication with one of the sources, would not have been obvious from the recitation of claim 8 and thus adds a separately patentable feature thereto.

Moreover, as noted above when discussing patentability over the applied art, nothing in the applied art teaches or suggests such operation, wherein a control signal is transmitted to the communication device. Therefore, even if, *arguendo*, the



applied art were held to make obvious the structure recited in claim 8, nothing therein can be said to teach or suggest the additional feature of claim 10.

It is noted that, at page 3 of the Action, claim 10 is rejected by reference to an inherent disclosure of "a microphone and a switch all in relation to the function of the control box (col. 3, lines 52-53)."

However, reference to the only cited disclosure finds the following teaching: "A Position Signal, generated by a microswitch 41 on an actuating microphone 42 attached to the headset 40, is transferred [to control box 20] over Position Signal line 49 to indicate the position of the microphone."

As clearly described therein, and as previously noted, operation of the '467 reference relies on *manual repositioning of the microphone* and on generation of a *position signal* by microswitch 41 to *identify the position of the microphone*. The signal is conveyed to the control box which, as described elsewhere, responds by performing the internal wiring changes.

However, it is quite clear that such an operation differs from the recitation of claim 10 in that claim 10 requires the switch to function "for generating a control signal transmitted to the portable communication terminal device" while no such transmission connection is described in the reference.

Thus, rather than transmitting a generated signal to phone 10, the '467 reference passes a position signal to control box 20.

Accordingly, obviousness of claim 10 can only be established by pointing to other art and, without the same, it is respectfully submitted that claim 10 is

patentably distinguished from the applied art for yet another reason, in addition to the distinctions of the parent claim 8 therefrom.

b) Grouping of the Claims

As noted in Section 6 of the present Brief, applicants respectfully submit that claims 8 and 10 are separately patentable.

In view of the remarks provided at pages 22-25 herein with respect to patentability of claim 10, irrespective of patentability of claim 8, it is courteously submitted that separate patentability of the claims has been asserted and argued.

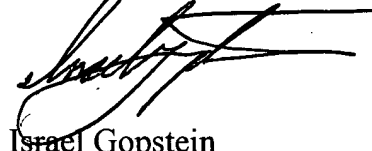
As demonstrated therein, lack of patentability of parent claim 8 would not necessarily result in lack of patentability of dependent claim 10 inasmuch as the applied art fails to teach or suggest the features added to claim 8 by the recitation of claim 10.

It is therefore respectfully submitted that claims 8 and 10 do not stand or fall together, that irrespective of patentability or obviousness of claim 8, the subject matter of claim 10 would not have been obvious to one of ordinary skill from the applied art of record, and that patentability of the claims must thus be separately considered.

**CONCLUSION**

For each of the foregoing reasons, it is respectfully submitted that the rejection set forth in the Final Action of April 17, 2003, is improper and that reversal of the same is in order.

Respectfully submitted,  
CLARK & BRODY

A handwritten signature in black ink, appearing to read 'Israel Gopstein', is written over the printed name.

Israel Gopstein  
Registration No. 27,333

1750 K Street, N.W. Suite 600  
Washington, D.C. 20006  
Date: January 20, 2004

(202) 835-1111  
(202) 835-1755 (fax)

## **9. APPENDIX**

### **Claims Involved in the Appeal**

Claims 1-7 have been cancelled during prosecution.

Claims 9 and 11 have been allowed and are not involved in the appeal.

1           8.    An earphone apparatus for an audio device and a portable  
2   communication terminal device, comprising:

3               a first plug for disconnectable connection with the audio device;

4               a second plug for disconnectable connection with the portable  
5   communication terminal device;

6               an electroacoustical transducer;

7               said electroacoustical transducer connected for receiving an audio signal  
8   provided by said first plug;

9               first means connected to the second plug for detecting whether or not a call-  
10   related electric signal is outputted from the portable communication terminal  
11   device, and generating a detection result signal representative of a result of said  
12   detecting; and

13              second means connected to the first plug, the second plug, the  
14   electroacoustical transducer and the first means, for automatically disconnecting  
15   the audio signal provided by said first plug from the electroacoustical transducer  
16   and automatically connecting the second plug to the electroacoustical transducer in  
17   response to the detection result signal generated by the first means when the first

18 means detects that a call-related electric signal is outputted from the portable  
19 communication terminal device.

1           10. An earphone apparatus as recited in claim 8, further comprising a  
2 microphone element connected to the second plug, and a switch connected to the  
3 second plug for generating a control signal transmitted to the portable communication  
4 terminal device.